Amendments to the Claims:

Claims 1-9 (cancelled).

10. (Currently Amended) An imaging system for a microscope based on extreme ultraviolet (EUV) radiation ~~with wavelengths~~ having a single wavelength in the range of less than 100 nm, comprising:

~~means for magnification of 0.1x to 1000x and~~ a plurality of imaging optical elements, the imaging system having a structural length of less than 5 m; and

at least one of the imaging optical elements in the beam path having a diffractive-reflective structure that reflects the EUV radiation having the single wavelength.

11. (Previously Presented) The imaging system according to claim 10, wherein the diffractive-reflective structure is arranged on a spherical or plane area and has a non-rotationally symmetric, asymmetric shape.

12. (Currently Amended) The imaging system according to claim ~~10~~ 11, wherein the spherical areas are concave or convex.

13. (Previously Presented) The imaging system according to claim 10, wherein two imaging optical elements are provided respectively with a diffractive-reflective structure, wherein the first imaging optical element has a concave area and the second imaging optical element has a convex area for the respective diffractive-reflective structure.

14. (Previously Presented) The imaging system according to claim 10, wherein the optical axis of the imaging system is inclined toward the object normal.

15. (Previously Presented) The imaging system according to claim 10, wherein the imaging optical elements are arranged in such a way that the optical paths intersect at least once.

16. (Previously Presented) The imaging system according to claim 10, wherein the imaging optical elements are arranged in such a way that the optical paths do not intersect.

17. (Previously Presented) The imaging system according to claim 10, wherein another imaging system is arranged downstream in order to realize a total magnification of 5x to 10,000x.

18. (Previously Presented) An inspection system for lithography masks based on an imaging system according to claim 10, wherein a first imaging optical element with spherically concave area has a diffractive-reflective active structure with about 240 lines/mm and a second imaging optical element with spherically convex area has a diffractive-reflective active structure with about 660 lines/mm, and the optical paths intersect once.

19. (New) An imaging system for a microscope based on extreme ultraviolet (EUV) radiation with wavelengths in the range of less than 100 nm, comprising:

a plurality of imaging optical elements, the imaging system having a structural length of less than 5 m; and

at least one of the imaging optical elements in the beam path having a diffractive-reflective structure;

wherein the plurality of imaging optical elements includes two imaging optical elements that are provided respectively with a diffractive-reflective structure, wherein one of the two imaging optical elements has a concave area and the other of the two imaging optical elements has a convex area for the respective diffractive-reflective structure..

20. (New) An imaging system for a microscope based on extreme ultraviolet (EUV) radiation with wavelengths in the range of less than 100 nm, comprising:

a plurality of imaging optical elements, the imaging system having a structural length of less than 5 m; and

at least one of the imaging optical elements in the beam path having a diffractive-reflective structure;

wherein another imaging system is arranged downstream in order to realize a total magnification of 5x to 10,000x.